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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/696,712	10/29/2003	Jan Lahmann	P50-0048	6456

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EXAMINER	
KNABLE, GEOFFREY L	

ART UNIT	PAPER NUMBER
1733	

DATE MAILED: 03/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/696,712	LAHMANN ET AL.	
	Examiner	Art Unit	
	Geoffrey L. Knable	1733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-10 is/are pending in the application.

4a) Of the above claim(s) 6-10 is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-5 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Election/Restrictions

1. This application contains claims directed to the following patentably distinct species:

I: the embodiment in which the turbulence generator is in the form of an aperture;

II: the embodiment in which the turbulence generators are in the form of an air deflector on a wall.

The species are independent or distinct because they represent mutually exclusive embodiments of the invention.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claim 1 is generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which depend from or otherwise require all the limitations of an allowable generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

2. During a telephone conversation with Frank Campigotto on March 14, 2006 a provisional election was made without traverse to prosecute the invention of species I, claims 1-5. Affirmation of this election must be made by applicant in replying to this Office action. Claims 6-10 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

3. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation

under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 1-3 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Scott (US 2,364,167) or Kuster et al. (US 2,357,960).

Scott discloses an autoclave for curing treads on tires with heated pressurized air including an elongated chamber having a frame for supporting tire/tread assemblies (figure), heating elements (11) in conduit (8), it being considered that this forms a heat exchanger for heating the air, as well as a supply duct having inlets and outlets (either conduits (8/9) or passages (6)), an air circulating system (fan 10) and what are considered to be air flow turbulence generators in the form of either the apertures in wall (5) or (8/9). It further is considered that these radially directed apertures would necessarily be disruptive of what could be termed a main air flow in the chamber and further include at least one aperture at a midpoint and these apertures can be said to be nozzles as claimed. This reference is therefore considered to anticipate the requirements of claims 1-3 and 5.

Kuster et al. provides a very similar disclosure and thus likewise is considered to anticipate these claims, it further being noted that this reference expressly indicates that the design is adapted to provide a very even gas distribution by avoiding "channeling flow" (e.g. page 1, col. 1, lines 5-12). Note also that this kettle also includes features that would provide an even more strongly directed "main flow" (using gap "10" and/or

sleeves "15"), the apertures being considered to be disruptive to this flow. Further, the fact that channeling flow is avoided would further seem to indicate to the artisan that turbulent flow is being generated.

8. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Emmons (US 1,420,371).

Emmons discloses an autoclave for curing treads/tires with heated pressurized air including an elongated chamber having a frame for supporting tire/tread assemblies (figures), heating means (15) for heating air by exchange from passage (10), as well as a supply duct (7) having inlets and outlets, an air circulating system (fan 23) and what are considered to be air flow turbulence generators in the form of distributing fan (26), this being said to insure more thorough distribution of the air.

9. Claims 1-3 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted state of the prior art taken in view of Sauer (US 3,605,717) and optionally further in view of Kuster et al. (US 2,357,960).

Paragraphs [018]-[020] on page 4 of the specification indicates that an autoclave for curing retreaded tires including an elongated chamber/frame/heat exchanger/supply duct/air circulating system as claimed is "in common use in the industry", it being considered that this represents the admitted state of the prior art. As to the claimed air flow turbulence generators, Sauer is also directed to a heating device with forced air flow in a very similar pattern to the admitted prior art (i.e. from a fan along an outer duct and then returned through the main chamber e.g. note esp. fig. 4) and in particular, indicates that openings may be provided in the baffle plates 21 to permit secondary air

circulation to ensure temperature uniformity (esp. col. 3, lines 43-50). Kuster et al. provides additional evidence of the known and desirable use of apertures in an inner supply duct wall of an autoclave for curing tires to help provide a more even heated gas distribution. To provide apertures/nozzles in the supply duct wall of the admitted prior art autoclave to allow for secondary circulation would therefore have been obvious with an expectation of enhancing temperature uniformity. Such secondary circulation would further have been expected to disrupt the main flow as claimed.

10. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted state of the prior art taken in view of Nakaji (US 4,974,663).

Paragraphs [018]-[020] on page 4 of the specification indicates that an autoclave for curing retreaded tires including an elongated chamber/frame/heat exchanger/supply duct/air circulating system as claimed is "in common use in the industry", it being considered that this represents the admitted state of the prior art. As to the claimed air flow turbulence generators, Nakaji is also directed to an autoclave heated with forced air flow in a very similar overall pattern to the admitted prior art (i.e. from a fan along an outer duct and then returned through the main chamber e.g. note esp. figs. 1/5) and in particular, suggests that guide blades "H" be provided in the main flow through duct 7a so as to induce turbulence in the main flow and thereby provide more even temperature distribution. To include such in an autoclave as in the admitted prior art would therefore have been obvious with an expectation of improved temperature uniformity in the autoclave chamber. Further, the adjacent plates are considered to define an aperture therebetween as required by claim 2, it being noted that since the entire flow begins and

ends at fan 33, the blades/apertures would be positioned at a midpoint of this flow as required by claim 3. As to claim 4, the plates also would seem to form louvers that guide air from the supply duct 7a (much as in the louvers of a louvered door or window shutters).

11. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Scott (US 2,364,167) or Kuster et al. (US 2,357,960) or [the admitted state of the prior art taken in view of Sauer (US 3,605,717) and optionally further in view of Kuster et al. (US 2,357,960)] as applied above, and further in view of Jones (US 4,490,110).

The references as already applied include/suggest apertures in an inner wall to allow air flow inwardly into the main chamber but do not include louvers. To include baffles or louvers to help direct the flow would have been obvious in view of Jones which is also directed to providing air flow through apertures in nozzles in an inner wall surrounding a main chamber and in particular suggests that using baffles at the apertures provides gas flow with improved flow uniformity (e.g. last sentence of line of abstract).

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Dawson (US 2,317,890) discloses a vulcanizer with slots 28 to allow secondary air flow to reduce cold spots but this air flows into the duct from the chamber and thus this reference is less relevant than the applied prior art.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Geoffrey L. Knable whose telephone number is 571-272-1220. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on 571-272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Geoffrey L. Knable
Primary Examiner
Art Unit 1733

G. Knable
March 17, 2006